INFORMAL EXAMINER'S AMENDMENT PLEASE SCAN FOR THE RECORD

approved BWH 4/27/07

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Canceled)

2 / 2. (CURRENTLY AMENDED) The optical waveguide device according to claim [[1]] 8, wherein the domain-inverted structure is formed by applying a voltage in a polarization direction of the substrate.

3 / 3. (CURRENTLY AMENDED) The optical waveguide device according to claim [[1]] 8, wherein the substrate composed of a nonlinear optical material is an offcut substrate.

4 / 4. (CURRENTLY AMENDED) The optical waveguide device according to claim 3, wherein the substrate has an offcut angle inclined in a range of 1° to 10° with respect to the substrate surface.

5 / 5. (CURRENTLY AMENDED) The optical waveguide device according to claim [[1]] 8, wherein the substrate is a thin film, having an optical substrate bonded via a bonding layer to one face of the substrate.

6 / 6. (CURRENTLY AMENDED) The optical waveguide device according to claim 5, wherein at least either the surface or a back face of the substrate is provided with a convex, and the domain-inverted structure is formed in stripes at the convex.

7 / 7. (CURRENTLY AMENDED) The optical waveguide device according to claim [[1]] 8, wherein the nonlinear optical material is a Mg-doped $LiNb_{(1-x)}Ta_xO_3$ ($0 \leq x \leq 1$).

1 / 8. (CURRENTLY AMENDED) ~~The~~ An optical waveguide device comprising:

a substrate composed of a nonlinear optical material and

a periodically domain-inverted structure having the same composition as the nonlinear optical material, wherein

the domain-inverted structure has a refractive index distribution relying on the domain-inverted structure ~~according to claim 1~~,

the nonlinear optical material is a Mg-doped $LiNbO_3$ crystal,

a phase matching wavelength harmonizes with a Bragg reflection wavelength, and

the Bragg reflection wavelength λ satisfies a relationship of $\lambda_1 < \lambda < \lambda_2$ when $\lambda_1 = 635 + 48 \times n$ (nm), $\lambda_2 = 1.02 \times \lambda_1$ (nm) where (n = 0, 1, 2), or

$\lambda_1 = 774 + 40 \times n$ (nm), $\lambda_2 = 1.02 \times \lambda_1$ (nm) where (n = 0, 1, 2, 3, 4...).

10/ 9. (CURRENTLY AMENDED) ~~The~~ An optical waveguide device comprising:

a substrate composed of a nonlinear optical material and

a periodically domain-inverted structure having the same composition as the nonlinear optical material, wherein

the domain-inverted structure has a refractive index distribution relying on the domain-inverted structure ~~according to claim 1~~,

the nonlinear optical material is a Mg-doped $LiNbO_3$ crystal,

a phase matching wavelength harmonizes with a Bragg reflection wavelength, and

the Bragg reflection wavelength λ satisfies a relationship of $\lambda_1 < \lambda < \lambda_2$ when $\lambda_1 = 613 + 48 \times n$ (nm), $\lambda_2 = 1.02 \times \lambda_1$ (nm) where (n = 0, 1, 2), or

$\lambda_1 = 754 + 40 \times n$ (nm), $\lambda_2 = 1.02 \times \lambda_1$ (nm) where (n = 0, 1, 2, 3, 4...).

19/ 10. (CURRENTLY AMENDED) ~~The~~ An optical waveguide device comprising:

a substrate composed of a nonlinear optical material and

a periodically domain-inverted structure having the same composition as the nonlinear optical material, wherein

the domain-inverted structure has a refractive index distribution relying on the domain-inverted structure, ~~according to claim 1~~,

the domain-inverted structure is composed of a wavelength-converting portion and a DBR portion, and

the phase matching wavelength of the wavelength-converting portion is equal to the Bragg reflection wavelength of the DBR portion, and a difference between the phase matching wavelength of the wavelength-converting portion and the Bragg reflection wavelength of the wavelength-converting portion is at least 5 nm.

8 / 11. (CURRENTLY AMENDED) A coherent light source comprising a semiconductor laser and an optical waveguide device according to claim [[1]] 8, where a light beam emitted from the semiconductor laser enters the optical waveguide device.

9 / 12. (ORIGINAL) An optical apparatus comprising the coherent light source according to claim 11.

11 / 13. (NEW) The optical waveguide device according to claim 9, wherein the domain-inverted structure is formed by applying a voltage in a polarization direction of the substrate.

12 / 14. (NEW) The optical waveguide device according to claim 9, wherein the substrate composed of a nonlinear optical material is an offcut substrate.

13 / 15. (NEW) The optical waveguide device according to claim 14, wherein the substrate has an offcut angle inclined in a range of 1° to 10° with respect to the substrate surface.

14 / 16. (NEW) The optical waveguide device according to claim 9, wherein the substrate is a thin film, having an optical substrate bonded via a bonding layer to one face of the substrate.

15 / 17. (NEW) The optical waveguide device according to claim 16, wherein at least either the surface or a back face of the substrate is provided with a convex, and the domain-inverted structure is formed in stripes at the convex.

16/ 18. (NEW) The optical waveguide device according to claim 9, wherein the nonlinear optical material is a Mg-doped $LiNb_{(1-x)}Ta_xO_3$ ($0 \leq x \leq 1$).

17/ 19. (NEW) A coherent light source comprising a semiconductor laser and an optical waveguide device according to claim 9, where a light beam emitted from the semiconductor laser enters the optical waveguide device.

18/ 20. (NEW) An optical apparatus comprising the coherent light source according to claim 19.

20/ 21. (NEW) The optical waveguide device according to claim 10, wherein the domain-inverted structure is formed by applying a voltage in a polarization direction of the substrate.

21/ 22. (NEW) The optical waveguide device according to claim 10, wherein the substrate composed of a nonlinear optical material is an offcut substrate.

22/ 23. (NEW) The optical waveguide device according to claim 22, wherein the substrate has an offcut angle inclined in a range of 1° to 10° with respect to the substrate surface.

23/ 24. (NEW) The optical waveguide device according to claim 10, wherein the substrate is a thin film, having an optical substrate bonded via a bonding layer to one face of the substrate.

24/ 25. (NEW) The optical waveguide device according to claim 24, wherein at least either the surface or a back face of the substrate is provided with a convex, and the domain-inverted structure is formed in stripes at the convex.

25/ 26. (NEW) The optical waveguide device according to claim 10, wherein the nonlinear optical material is a Mg-doped $LiNb_{(1-x)}Ta_xO_3$ ($0 \leq x \leq 1$).

26/ 27. (NEW) A coherent light source comprising a semiconductor laser and an optical waveguide device according to claim 10, where a light beam emitted from the semiconductor laser enters the optical waveguide device.

27/ 28. An optical apparatus comprising the coherent light source according to claim 27.